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CLOSURE PLAN OF THE BUNKER HILL COMPANY

1. INTRODUCTION

The objective of this document is to set forth a closure plan in the event it becomes necessary to shut down all or any portion of The Bunker Hill Company's operations in and near Kellogg, Shoshone County, Idaho. It is unnecessary to describe here in detail the nature and extent of Bunker Hill's complex, in that it is well known. Suffice to say Bunker Hill consists of a lead/zinc mine and concentrator, a silver mine (The Crescent), lead smelter, zinc plant, fertilizer plant and associated facilities.

This plan is designed to provide for the closing of the facility, or a portion of same, in a manner that minimizes the need for further maintenance and controls and minimizes or eliminates, to the extent necessary to prevent threats to human health and the environment, post-closure escape of hazardous waste.

2. GENERAL CLOSURE DESCRIPTION

2.1 TIME ALLOWED FOR CLOSURE

If a decision is made to shut down it is possible that a major part of the metallurgical plants will be closed but that the mines, mill and concentrator will remain in operation. This plan is written to anticipate the shutdown of some or all facilities. In the event that only the metallurgical plants, or some other portion of the facility, shuts down then only those items peculiar to or necessarily interacting functionally with the metallurgical plants, or the portion being shut down, will be addressed at that time.

The process of closure of the entire facility, or any portion thereof, shall be substantially completed not later than four years from the date of salvage commencement. If salvage is contracted out, salvage commencement shall be the date of the contract. For good cause shown, the Company shall be entitled to extensions of time to complete closure.

By not later than 36 months after the date of salvage commencement, all hazardous materials to be sold, and all materials classified as "B," "C," "D," "E," or "F", shall be properly disposed of pursuant to this plan. So long as such materials remain on Company property, they shall be secured against casual human access. For good cause shown, the Company shall be entitled to extensions of time for compliance with this paragraph.

2.2. DISPOSAL OR DECONTAMINATION OF EQUIPMENT

After all usable raw material has been processed through the plants, the bulk of the remaining raw materials and secondaries, generated during processing, will be classified and moved to areas for disposal as described below under 2.7.'Classification of Materials'. Remaining in the plants will be residues contained in the bottoms of tanks, dusts in ductwork and on building trusses, residual raw materials in bins adhering to the sides and the numerous places in which dusts can gather in a large metallurgical complex. These will be properly classified and disposed of at the time of demolition. (See 2.8.8.)

A contract will be awarded substantially in the form attached hereto as Exhibit A. It should be noted that Exhibit A as written applies only to the metallurgical plants and fertilizer plant and not to the mines and mill. It is intended to write a contract for the mines and mill in substantially the same form as Exhibit A in the event of closure. Not all work required upon closure will be performed by independent contractors. Instead, any work called for in this plan that is not covered by contract, such as Exhibit A, will be performed by the The Bunker Hill Company.

Specific requirements which are considered necessary to achieve the objective of this shutdown plan are stated below. These provisions will be incorporated into Exhibit A and similar contracts. It is understood that Exhibit A is for illustrative purposes only and this Closure Plan is

the controlling document.

2.3 REGULATORY COMPLIANCE

Bunker Hill will assure that closure activities comply with all local, state and federal rules, regulations, permits and laws applicable to the property for the control of air and water pollution. This Closure Plan is intended to specify the action required to accomplish this objective.

2.4 HAZARDOUS WASTES

Removal and disposal of hazardous wastes and toxic substances including contaminated products of demolition will be done in accordance with applicable law. The specific methods are as set forth below under 2.6. "Waste Material Disposal." It is the intent of this plan to dispose of wastes in such a way that it can be reasonably expected that no illegal release can occur in the future.

Contaminated water borne effluents from closure activities will be treated to comply with the NPDES permit. Systems that channel these effluents to the Central Impoundment Area will not be disturbed during closure activities.

It is anticipated that eventually the flow of waste water from the surface plants will cease upon plant shut down and closure, however, some mine discharge water may flow from the Kellogg Tunnel, which is the lowest mine portal, after the Bunker Hill Mine is flooded. This water and any other mine discharge will be treated in accordance with the NPDES permit conditions in effect on the date of discharge. So long as polluting effluent is discharged from the CIA, an NPDES permit will be obtained for such discharge.

2.5 WATER SAMPLING

Water sampling will be performed once each week after shutdown and the NPDES permit will be modified accordingly. The Company may apply for further permit modification if the Company can demonstrate that less frequent sampling, or sampling for different parameters, is appropriate.

The demonstration shall be based upon the extent of either stabilization of parameters, decreasing levels of pollutants, levels of detectability or other good cause.

2.6. WASTE MATERIAL DISPOSAL

Waste material will be disposed of as described below, or in a manner substantially equivalent to the described methods. In addition, all areas that present potential dusting problems of a magnitude that would prevent attainment and maintenance of ambient air standards in effect at the time of closure will be controlled by taking reasonable precautions to prevent fugitive dust from becoming airborne.

2.7. CLASSIFICATION OF MATERIALS

Materials (whether raw materials, secondary products, non-hazardous wastes, hazardous wastes, toxic substances) will be classified as follows:

Classification 'A' Material which will remain in place and is not considered to be hazardous and will not pose a threat to human health, welfare or to the environment.

Classification 'B' Material which will be placed into the CIA as it is substantially the same type of material that comprises the bulk of the thousands of tons of material currently stored in the CIA.

Classification 'C' Material which has commercial value. Attempts will be made to sell this material to other processing plants. In the event that no sale is possible it will be reclassified as either 'B' or 'F' and disposed of accordingly.

Classification 'D' Material which has already been sold and is under contract to be removed.

Classification 'E' Material in an intermediate form which will be processed into another form and then reclassified in most instances as 'B', 'C' or 'D.'

Classification 'F' Material which is considered hazardous or toxic and which will be disposed of in accordance with all applicable laws, rules and regulations at licensed disposal sites.

The present location and estimated quantities of these materials by classification is shown on the aerial photocopies of the Bunker Hill properties marked Exhibits B1 (mine area), B2 (smelter area) and B3 (zinc plant area). Typical analyses of these materials are contained in Exhibits C.

Where materials falling under classifications 'B,' 'C,' 'D,' 'E' and 'F' are removed from ground areas, the ground will be scraped to bare earth and disposed of properly under this plan.

The Company shall scrape such areas down to 3 or 4 inches below the surface of the underlying earth. A representative composite sample (plotted and taken from at least four diverse locations) shall be taken from each such ground area and shall be analyzed for heavy metals and hazardous and toxic substances. The ground area will be then either a) platted, covered and revegetated, or b) platted and fenced, or c) treated as "newly discovered material" under this plan, or d) declared to be reasonably safe and left in place.

2.8. WASTES NOT CLASSIFIED AND/OR NOT SHOWN ON EXHIBITS

2.8.1. Zinc Plant Electrolyte. Electrolyte is weak sulfuric acid containing dissolved zinc. The electrolyte will be stripped of zinc to the extent possible and the residual material neutralized to produce gypsum and placed in the CIA. All tanks which contained the electrolyte will then be thoroughly washed down.

2.8.2. Manganese Dioxide. Residual manganese dioxide settles in the bottom of tanks and launders in the electrolytic section of the zinc plant. This material will be washed out and placed in the CIA.

2.8.3. Mine Dumps and Smelter Slag Piles. These dumps and piles will remain in place as they do not present any known environmental problem at this time or in the foreseeable future.

2.8.4. Process Reagents. This material shall be properly classified and disposed of in accordance with their classification.

2.8.4. PCB's. All PCB's and units containing PCB's are classified as "F" and will be sold or disposed of in strict compliance with all applicable laws, rules and regulations. See Exhibit 'D,' PCB Disposal Procedures.

2.8.5. Asbestos. Friable asbestos will be removed, handled and transported in accordance with all applicable laws, rules and regulations. See Exhibit 'E,' Asbestos Disposal Procedures.

2.8.6. Vanadium Pentoxide. This material is classified as 'F' and will be removed to a licensed disposal site.

2.8.7. Radioactive Waste. These materials will be handled, stored, and/or disposed of in accordance with Idaho State law.

2.8.8. Newly Discovered Material or Contractor Generated Material. All materials whether known or not will be classified as they are found or are generated and will then be disposed of according to their classification. In all cases Bunker Hill will ensure that such classification and disposal is consistent with the objectives of this plan to protect human health, welfare and the environment and is promptly reported to EPA as to quantity, composition and proposed disposition.

2.9 SPILLS

Any existing applicable "spill" statutes and regulations shall continue to apply to any closure activities.

2.10. NON-HAZARDOUS WASTES AND DEMOLITION DEBRIS

2.10.1. Salvageable Materials. Before off site disposition Bunker Hill will properly clean all equipment and building type materials and notify purchasers of the fact that the equipment and material came from a metallurgical complex which handled and processed hazardous materials. Cleaning agents and effluent will disposed of after having been properly classified.

2.10.2. Material to be Burned. Material which can readily be disposed of by incineration will be properly cleaned and burned. State and local authorities will be informed and no burning will be undertaken until State and local authorities are satisfied that it does not present a danger to the population or to the environment.

2.10.3. Landfill-type Debris. A site will be chosen on Bunker Hill property which will be utilized for permanently burying demolition debris. Bunker Hill will work in conjunction with local authorities on the selection of this site and will permanently document its location.

2.11. DUST CONTROL

Periodic washing of the major roads and areas being demolished, including the use of suppressants, will continue as needed during plant demolition. It is assumed such dust control measures will not be necessary so long as the ambient air quality standards for lead and total suspended particulate are being maintained.

2.11.1 Air monitoring. The Company will conduct ambient air monitoring during the course of demolition to help determine whether National Ambient Air Quality Standards for lead and total suspended particulate are exceeded. State monitoring data will also be used for this determination. Bunker Hill will maintain two of the existing ambient air monitors at their existing locations now being operated by Bunker Hill.

2.11.2 Revegetation. The program initiated by Bunker Hill to revegetate the barren hillsides will continue until completion of the program which is anticipated to take until the summer of 1984. At least 300 trees or bushes per acre will be planted, the type depending on its survival potential in the particular location. Certain areas which are either too steep, contain no topsoil or for some other reason cannot support the reestablishment of trees will not be planted. (Disposal site and CIA revegetation is covered under Closure of Solid Waste Sites.)

2.12. ADMINISTRATION

A Resident Manager will be appointed who will be responsible for all Bunker Hill affairs and he will be assisted by a group of specialists to ensure compliance with this plan. At the present time the resident manager is Mr. Barry Tierney. It is currently anticipated that Mr. Tierney will be with Bunker Hill for a period of five years. In the event that the Bunker Hill Property is sold or all personnel leave the area the EPA contact on environmental matters should either be the new owner or the President of Gulf Resources & Chemical Corporation, 47th Floor, 1100 Milam Building, Houston, Texas 77002.

2.13. CLOSURE OF SOLID WASTE SITES

After all material finally classified as 'B' has been disposed of in the CIA (which includes the gypsum pond), the inactive portion of the CIA (if there is an inactive portion) will be covered with a layer of material suitable to support vegetation and will be revegetated. In the interim (and until such time as vegetation has established itself), other measures (such as dust suppressants) will be used. As additional portions of the CIA are deactivated (if the decision is made to deactivate a portion), those will be similarly covered and revegetated. Integrity of the CIA dike shall be maintained during closure and post closure periods to the extent necessary to comply with the purpose of the plan stated in paragraph 1.

Disposal sites developed on Company property during closure will be similarly covered and revegetated. Upon final closure, all disposal sites will be accurately depicted "as built" on copies of exhibits B1, B2 and B3. Copies of such "as built" records shall be transmitted to EPA. EPA may cause such documents to be filed and recorded with appropriate Shoshone County authorities.

2.14. FENCING

It is anticipated that following the complete closure of the property (including the CIA) fencing will not be required. In the event that areas undefined at present exist which require fencing they will be fenced with a six foot high diamond mesh fence. In any case, measures will be provided which are sufficient to prevent any casual human ingress onto active portions of the CIA, or onto uncovered or unrevegetated disposal sites.

2.15. SHUTDOWN INSPECTION

The EPA and its representatives may at any time enter and inspect the facilities to ensure that closure and demolition activities are consistent with this closure plan. If at any time EPA inspections reveal activities or procedures occurring at the site which may yield results inimical to the overall objective of this Closure Plan, then the Company will promptly consider and evaluate any such EPA concerns brought to its attention.

2.16. GENERAL POST CLOSURE ACTIVITIES

2.16.1. Ground Water Monitoring. Ground water monitoring, will be continued in the geographical area of the Central Impoundment Area as required by the terms of the NPDES permit in existence. It is planned that such sampling after complete CIA closure will be done on an annual basis for 30 years and then terminated. The Company shall be entitled at any time to terminate such monitoring upon demonstrating that contaminant levels above background

have either stabilized, are decreasing, reached less than detectable levels, or for other good cause.

2.16.2. Post Closure Maintenance. Maintenance activities that will be conducted after complete closure of the facilities, or any portion thereof addressed in this document, will consist of adequately and periodically maintaining water treatment facilities, monitoring NPDES permit requirements, ensuring security of the area (which may be use of city and/or county police) and making any necessary repairs and corrections to the above listed items.

EXHIBIT C
TYPICAL OR APPROXIMATE ANALYSIS

	Solid %	Liquid %	PH	Insol %	AS %	Ba %	Cd %	Cr %	Pb %	Hg ppm	Se %	Ag ppm	Cu %	Fe %	Mn %	Zn %	S %
CLASSIFICATION "A"																	
A1, A2, A3, A4, A5 GYPSUM																	
A6 GRANULATED SLAG		5+/-		Bal	.02	.8	.01-.001	.04	.04-.10	.4		4+/-	.10-.20	10-25	1.0-1.5	2.0-3.0	1.5
A7 BLAST FURNACE SLAG				Bal	.10-.15	.5 +/-	.01-.10	.02 +/-	2.0--10	2-10		20-200	.15 +/-	20 +/-	1.0-1.5	15 +/-	
A8 LANDFILL, MISC DEBRIS																	
A10 COARSE LIMESTONE																	
A11 MILLED LIMESTONE							.5 +/-		3+/-	1+/-		40 +/-		3+/-		2.5 +/-	
A13 TAILINGS POND SANDS		30 +/-			.07		.001-.002	.015	.2-.4	1.5 +/-		5+/-	.01 +/-	5+/-		.2 +/-	
A14 CTP SLUDGE				11%	<.02	.03	.7	.003	.3	2.5		2	.15	6	3	26+/- 2%	
CLASSIFICATION "B"																	
B1, B2, B3, B4 B5 SINTER					.5 +/-		1+/-		40 +/-			750 +/-	1+/-			10 +/-	2+/-
B6, B7 SILICA SAND					.05	.02	.005	.01-.10	.8 +/-	5+/-		20 +/-	.02 +/-	13 +/-	1+/-	.5 +/-	
B8, B9 ALLOY DROSS					.02-.05	.005	.003 -.04	.01-.02	.07-.3	5+/-	<.02	2-20	.4-.8		.05-.10	30-40	

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	Solid %	Liquid %	PH	Insol %	AS %	Ba %	Cd %	Cr %	Pb %	Hg ppm	Se %	Ag ppm	Cu %	Fe %	Mn %	Zn %	S %
CLASSIFICATION "C"																	
C1, C2, C6, ANTIMONY SKIM					3+/-	.035	.2-.7	.008 +/-	15-65	20 +/-		200 +/-	.5-2.0	1.5 +/-		.5-3.0	
C3 SMELTER CLEANUP		15 +/-					1+/-		20-40			500 +/-	.5 +/-			10 +/-	
C4 SMELTER BAGHOUSE PRODUCT							17.2		44				.3			5	5
C5 BUNKER HILL CONCENTRATES				2.7	.29		.03		61.4			1700	1.1	6.4		7.0	18.6
C7, C8 SWEENEY POND SLUDGE		15-45			.4 +/-	.08 +/-	.4-4	.007	20-40	150		100-1000	.2-.8			4-8	
C9 ZINC PLANT POND SLUDGE		23.1		9.1			.5		6			450		7		40	20
CLASSIFICATION "D"																	
D1, D2, D6-D9 ZINC PLANT RESIDUE		35 +/-			.5 +/-	.1 +/-	.4 +/-	.01 +/-	10 +/-	50 +/-		1000 +/-	1.5 +/-			16 +/-	6.5 +/-
D3 COPPER DROSS FLUE DUST (Cu FUME)					10-20	<.005	.5-5.0	.002	50 +/-	10 +/-		100 +/-	.1 +/-			1-5	
D4 COPPER MATTE					.5-1.5		.2 +/-		35 +/-			2000 +/-	50 +/-	.5 +/-			15 +/-
D5 IRON SPIESS					16 +/-				25 +/-			2000 +/-	40 +/-				5+/-

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	Solid %	Liquid %	PH	Insol %	AS %	Ba %	Cd %	Cr %	Pb %	Hg ppm	Se %	Ag ppm	Cu %	Fe %	Mn %	Zn %	S %
CLASSIFICATION "E"																	
E1 COPPER DROSS GRANULATED SLAG					1.5 +/-		.15 +/-	.05 +/-	30 +/-	.15 +/-		350 +/-	10 +/-	10 +/-		5+/-	
E2 COPPER DROSS		1+/-			3/5 +/-		.05 +/-		60 +/-				15 +/-			2+/-	5+/-
CLASSIFICATION "F"																	
F1 HOLDING POND Gas Heat Exchanger Scale Est @1% of Steel Weight		26.3								730				19.1			
Composite of Sludges	64.7	35.3			3.5	.028	.044	.017	1.2	2170	<.02	.009	7.4			13.1	
Ceramic Column Packings Coating & Scale Assay is of Soluble 1%				99 +/-	.9-1.4	.013-.019	.10-.17	.006-.013	.4-.8	5.4-39%	.02-.1	.003-.007	1.7-3.0			1.2-2.6	
Surface Dirt	86.2	13.8			.13	.058	.007	.009	.03	139	<.02	.001%	.014			.12	
F2 ZINC PLANT FLUE DUST STOCKPILE			5.3		.11	.04	.12	.004	3.7	.3%	<.02	.02	.30		.30	33.6	
F3 ACID TANK SLUDGES	20-40	Sul. Acid	93%							1-3%							
F4 SUSPECTED COBALT RESIDUE		35		10-20	5+/-		2+/-		1+/-	15-50		80 +/-	5-15	1-10		20-30	5+/-

EXHIBIT D

PCB DISPOSAL

Sampling, Analysis, and Disposal of PCB contaminated Transformers at The Bunker Hill Company Site in Kellogg, Idaho.

1. REGULATORY COMPLIANCE

Operations during the project will comply with all applicable federal, state, and local regulations more particularly:

1.1 The Resource Conservation and Recovery Act, Public Law 94-580

RCRA regulations, effective November 19, 1980, cover generating transporting, storing, treating, and disposing hazardous wastes. The regulations require manifesting of all wastes shipped from the site. These manifests will be signed by Bunker Hill.

1.2 The Toxic Substances Control Act: 40 CFR 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions

This regulation governs the handling, testing, packaging for shipping, and disposal of PCBs and PCB-contaminated substances.

1.3 Transportation: 49 CFR Parts 100 to 199

This regulation governs the transportation of hazardous materials. Hazardous materials shipped from The Bunker Hill Company site will comply with these regulations.

EXHIBIT E

FRIABLE ASBESTOS MATERIAL DISPOSAL

Handling and Disposing of Friable Asbestos material during demolition at the Bunker Hill Company site in Kellogg, Idaho.

1) REGULATORY COMPLIANCE

Operations during the project will comply with all applicable Federal, State and local regulations more particularly:

1.1) Regulations on National Emission Standards for Hazardous Air Pollutants: 40 CFR, 61, Subpart B.

This regulation governs the removal, handling and disposal of friable asbestos material from demolition activities.

1.2) Transportation: 49 CFR Parts 100 to 199

This regulation governs the transportation of hazardous materials. Hazardous materials shipped from the Bunker Hill Company site will comply with these regulations.